TOOTOT STOh2660

SYSTEM OVERVIEW
100

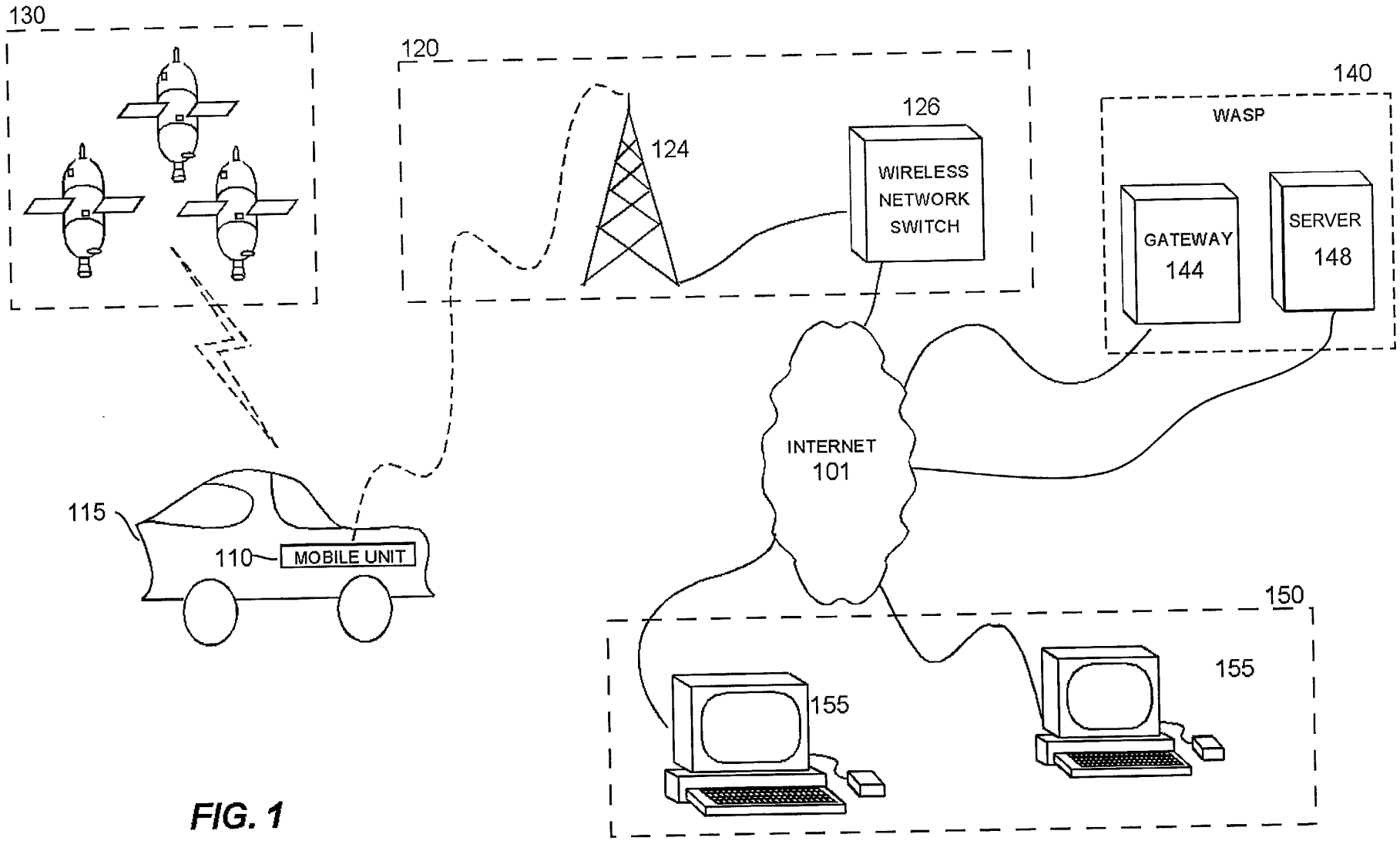


FIG. 1

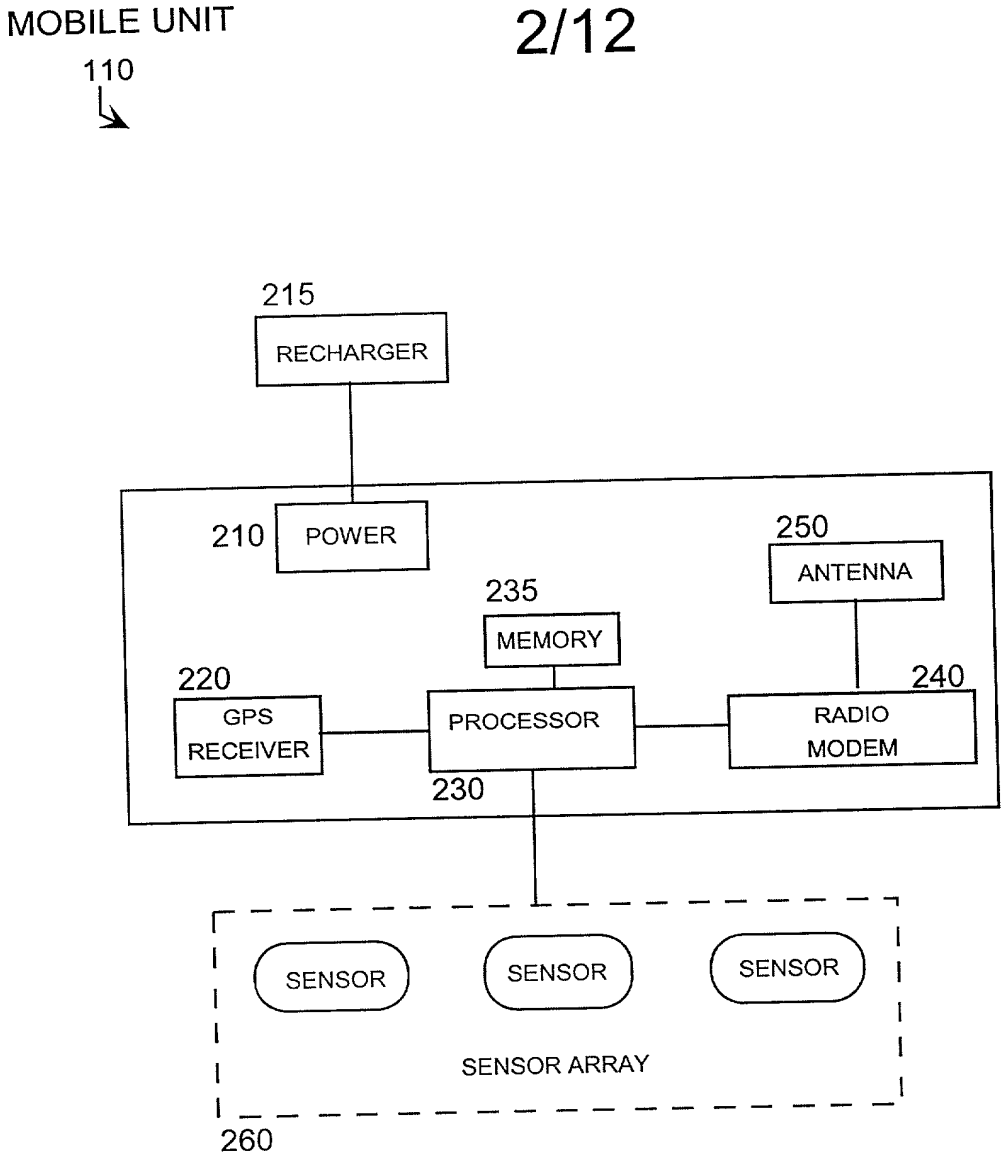

MOBILE UNIT
110
215
RECHARGER
210
POWER
250
ANTENNA
235
MEMORY
220
GPS
RECEIVER
PROCESSOR
240
RADIO
MODEM
230
SENSOR
SENSOR
SENSOR
SENSOR ARRAY
260

FIG. 2

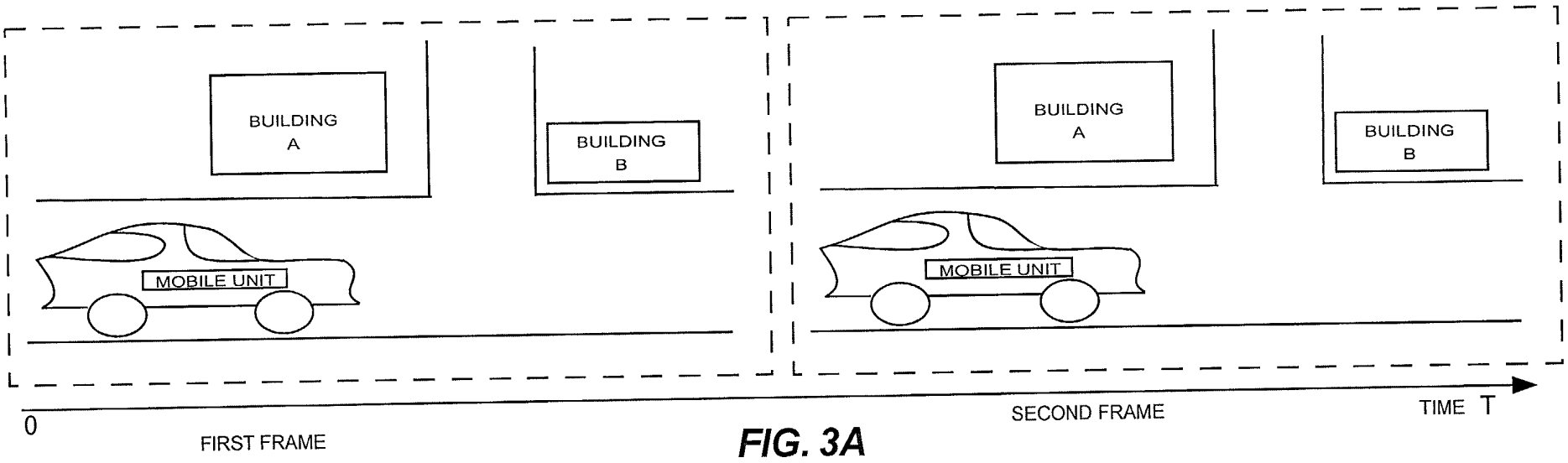

BUILDING A
BUILDING B
MOBILE UNIT
BUILDING A
BUILDING B
MOBILE UNIT
0
FIRST FRAME
SECOND FRAME
TIME T

FIG. 3A

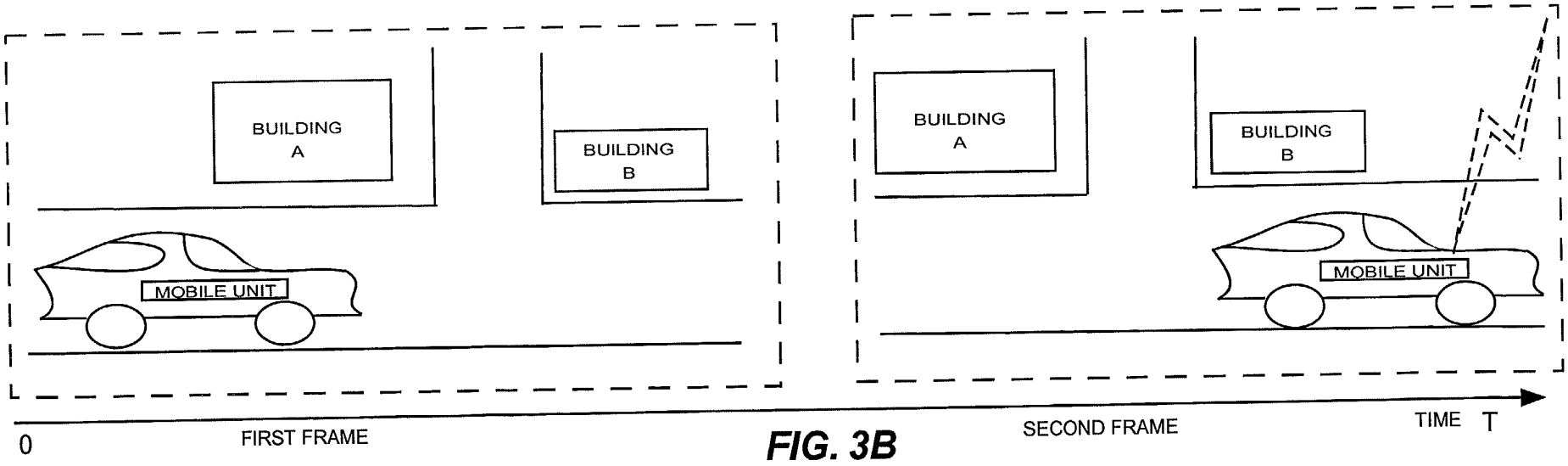

BUILDING A
BUILDING B
MOBILE UNIT
BUILDING A
BUILDING B
MOBILE UNIT
0
FIRST FRAME
SECOND FRAME
TIME T

FIG. 3B

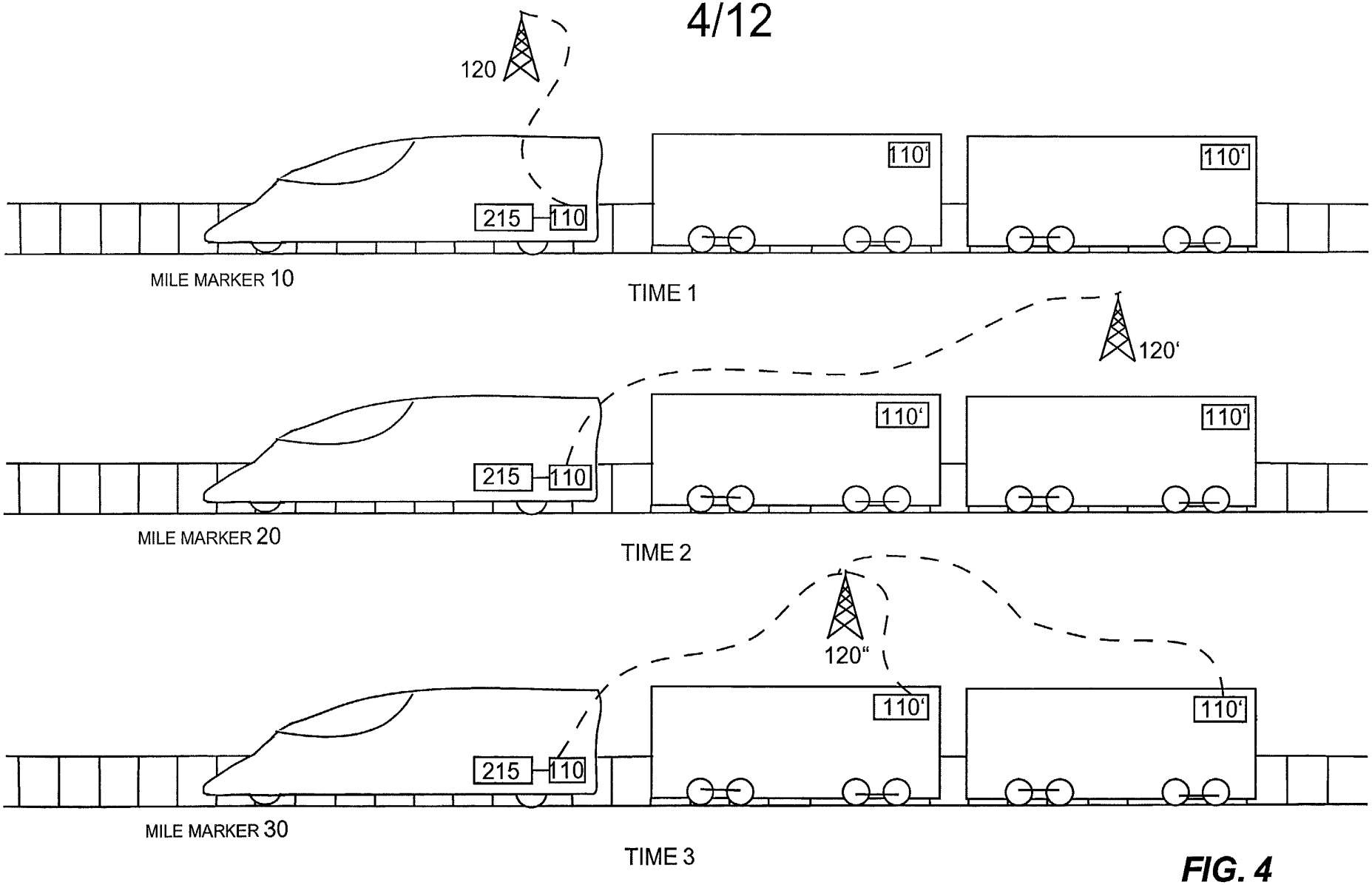

120
110'
110'
215
110
MILE MARKER 10
TIME 1
120'
110'
110'
215
110
MILE MARKER 20
TIME 2
120"
110'
110'
215
110
MILE MARKER 30
TIME 3

FIG. 4

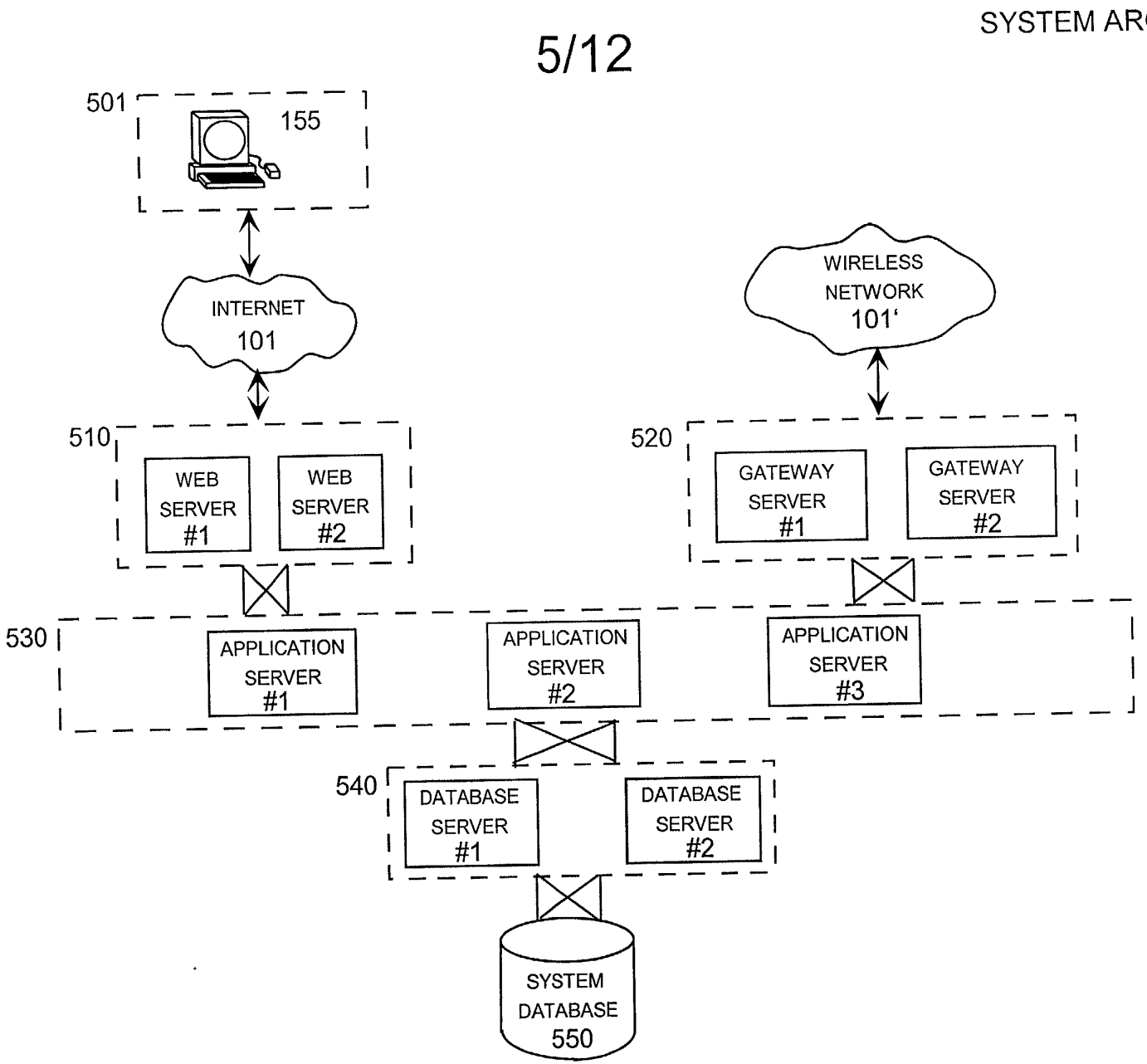
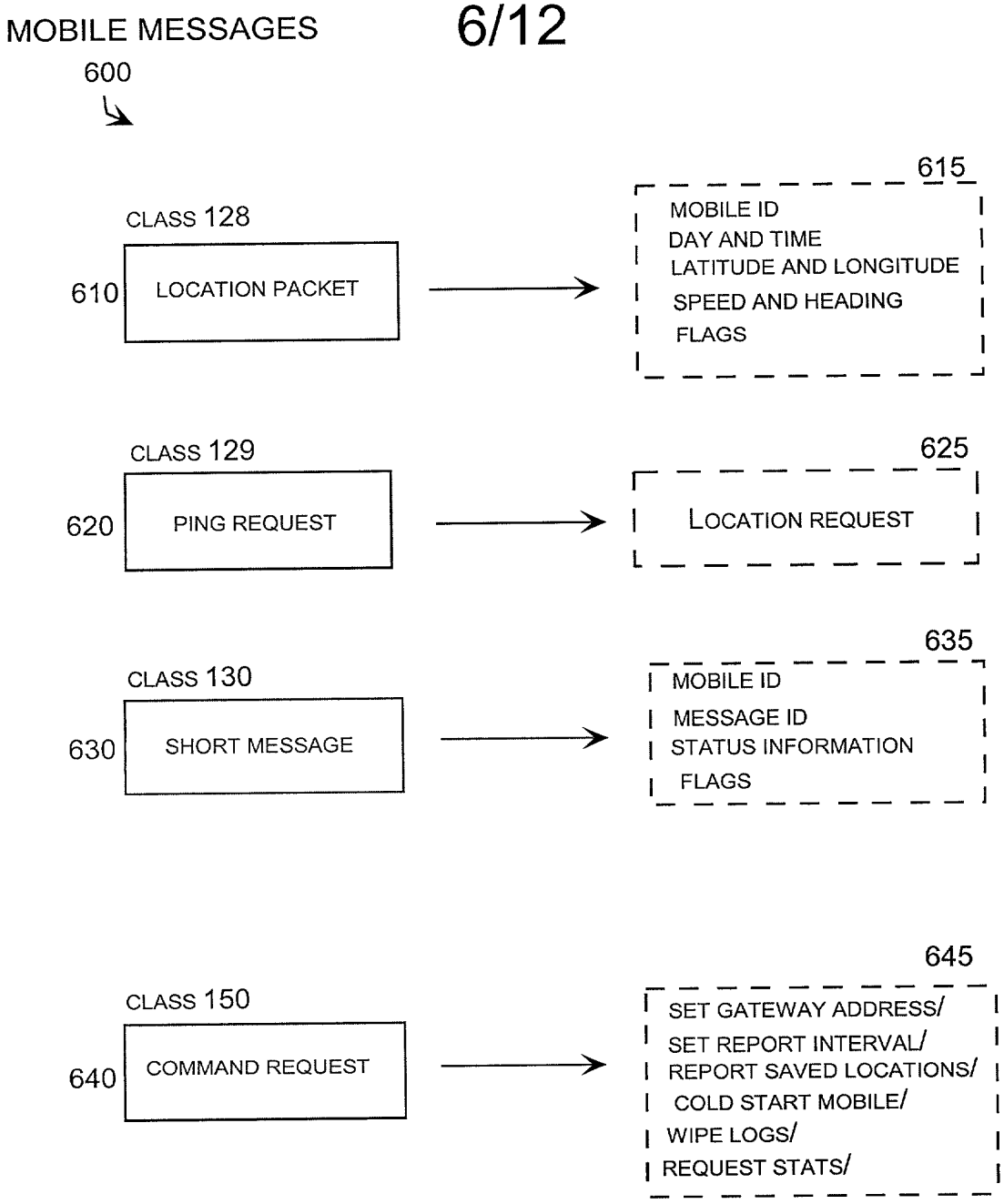

SYSTEM ARCHITECTURE
500
501
155
INTERNET
101
WIRELESS
NETWORK
101'
510
WEB
SERVER
#1
WEB
SERVER
#2
520
GATEWAY
SERVER
#1
GATEWAY
SERVER
#2
530
APPLICATION
SERVER
#1
APPLICATION
SERVER
#2
APPLICATION
SERVER
#3
540
DATABASE
SERVER
#1
DATABASE
SERVER
#2
SYSTEM
DATABASE
550

FIG.5



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POWER CONSERVATION ROUTINE

700

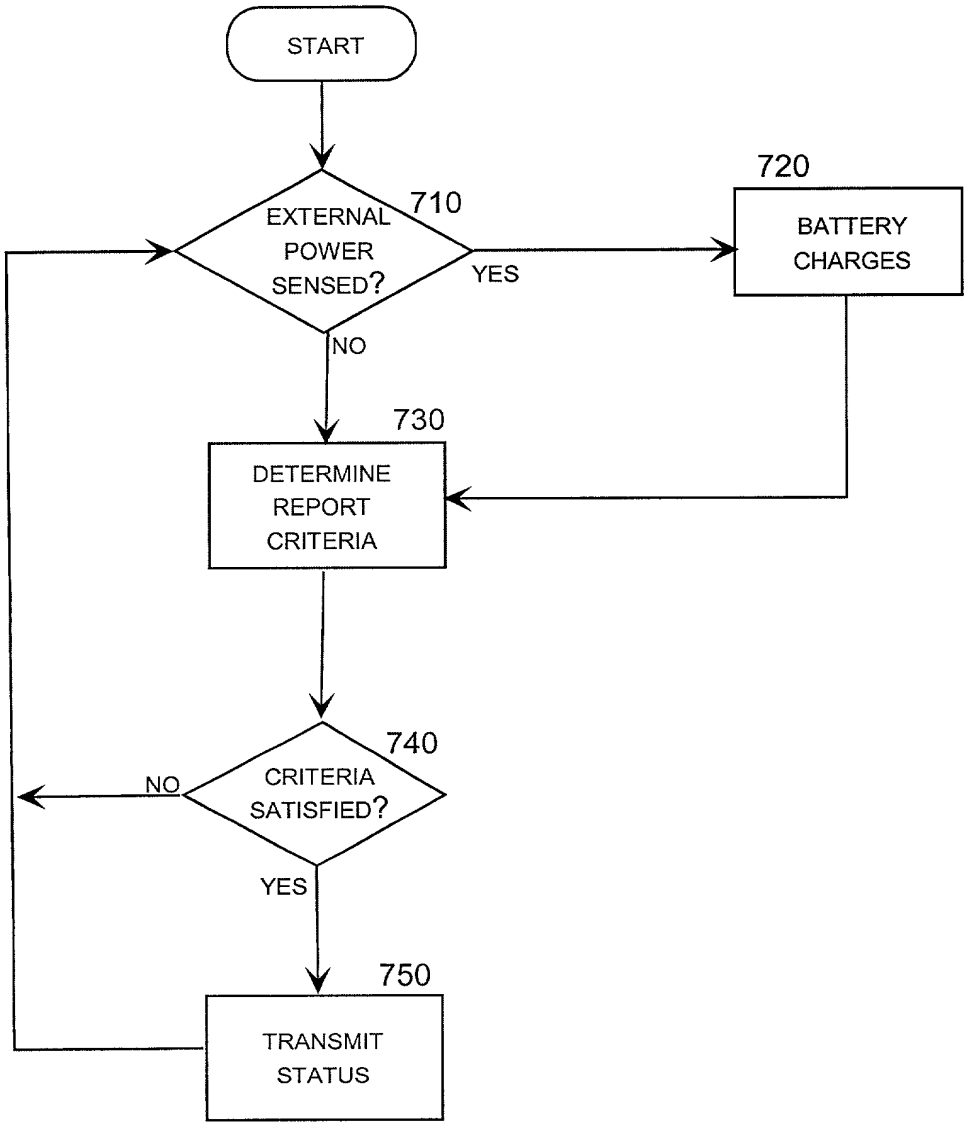
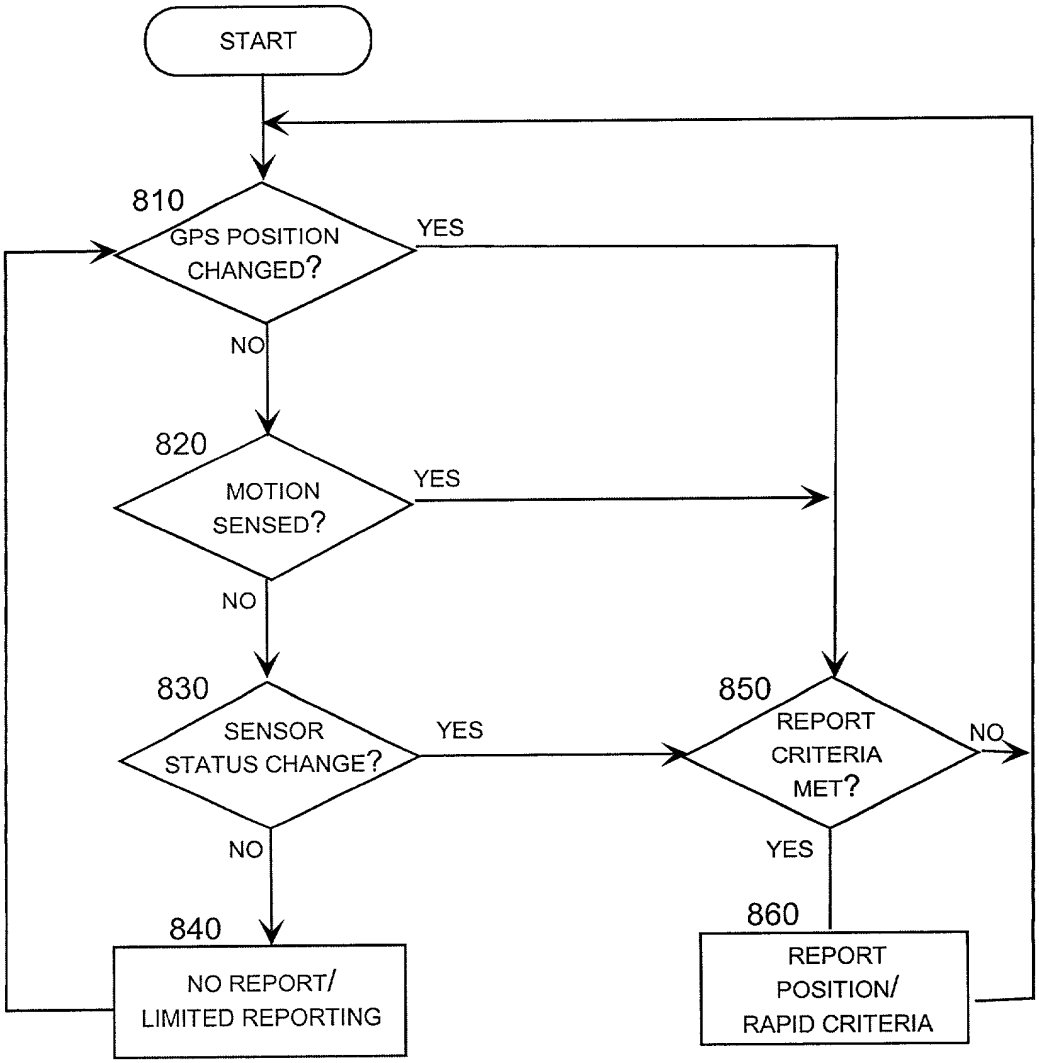


FIG. 7

BROADCAST ROUTINE

800



Patent Application Publication

FIG. 8

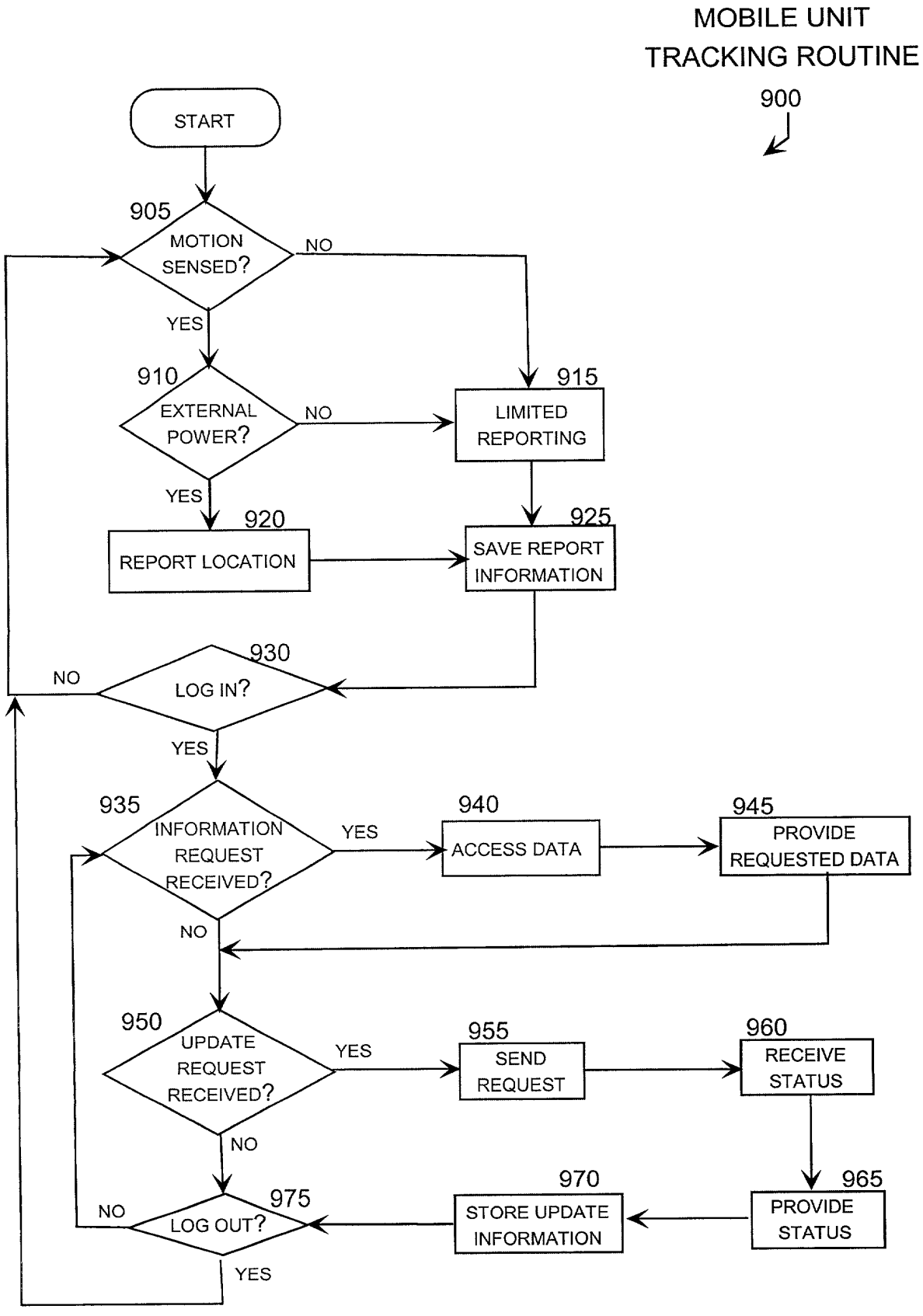

MOBILE UNIT
TRACKING ROUTINE
900
START
905
MOTION SENSED?
NO
YES
910
EXTERNAL POWER?
NO
915
LIMITED REPORTING
YES
920
REPORT LOCATION
925
SAVE REPORT INFORMATION
930
LOG IN?
NO
YES
935
INFORMATION REQUEST RECEIVED?
YES
940
ACCESS DATA
945
PROVIDE REQUESTED DATA
NO
950
UPDATE REQUEST RECEIVED?
YES
955
SEND REQUEST
960
RECEIVE STATUS
NO
965
PROVIDE STATUS
970
STORE UPDATE INFORMATION
975
LOG OUT?
NO
YES

FIG. 9

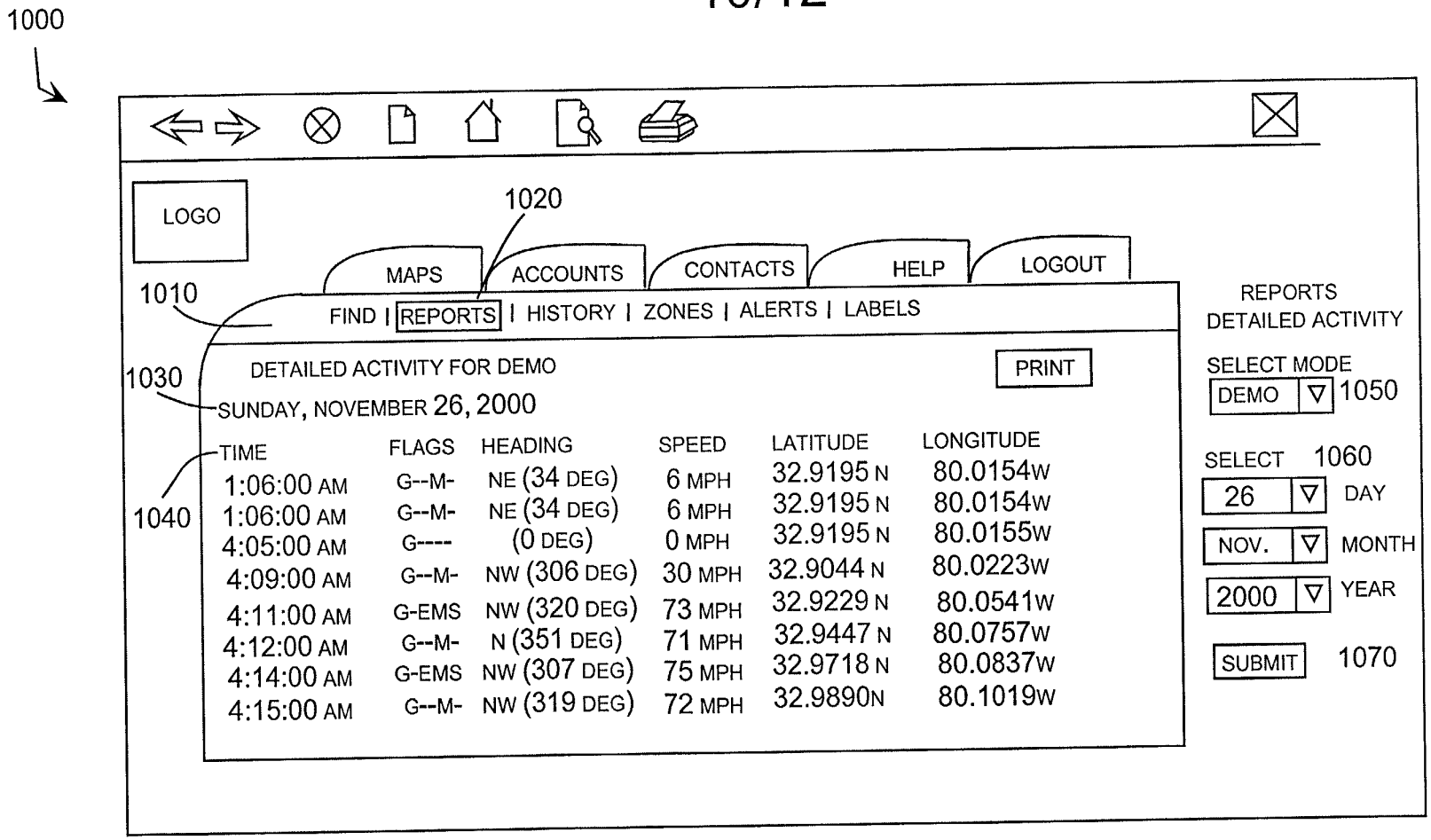
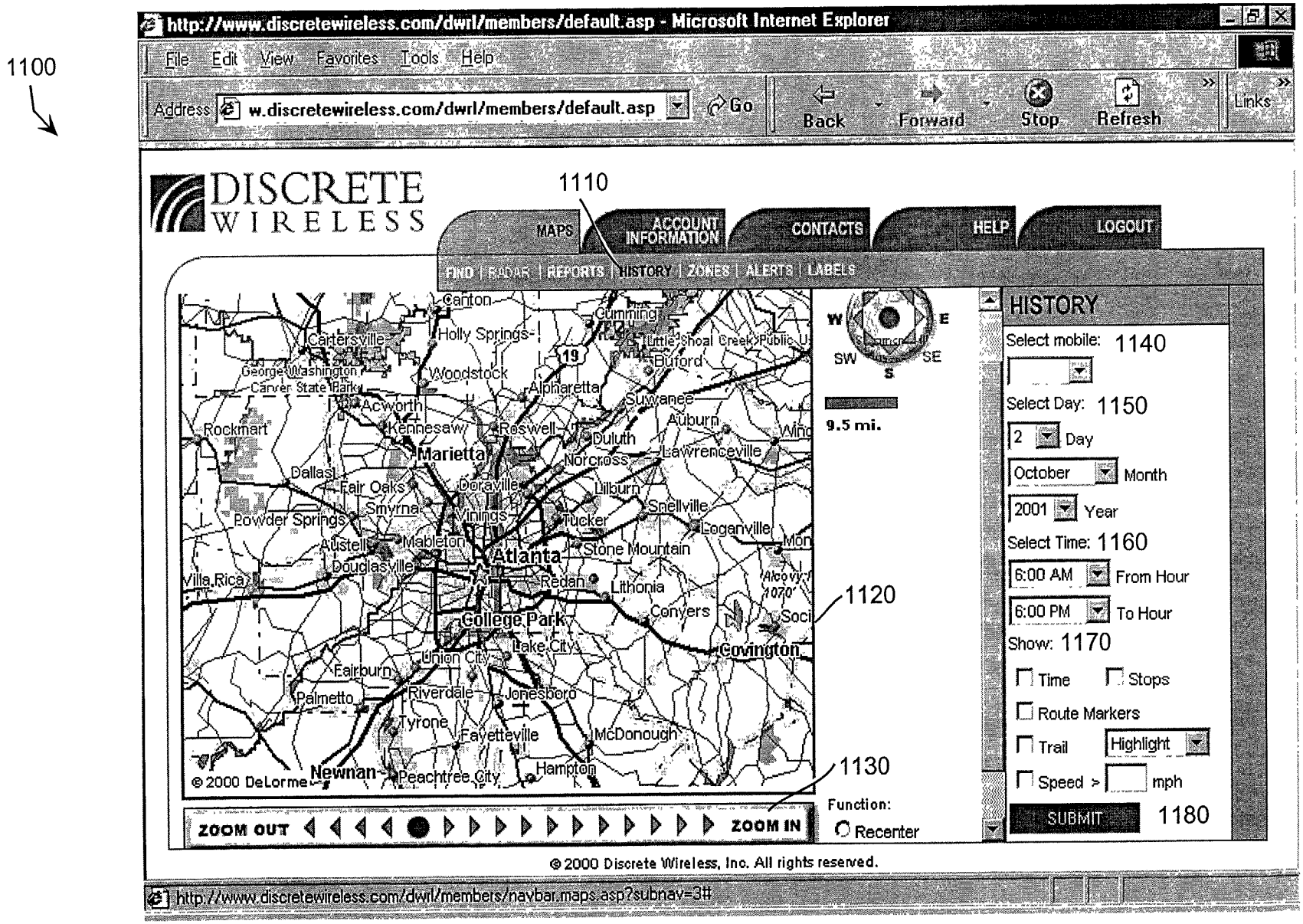

1000
LOGO
1020
MAPS
ACCOUNTS
CONTACTS
HELP
LOGOUT
1010
FIND | REPORTS | HISTORY | ZONES | ALERTS | LABELS
1030
DETAILED ACTIVITY FOR DEMO
PRINT
SUNDAY, NOVEMBER 26, 2000
1040
TIME FLAGS HEADING SPEED LATITUDE LONGITUDE
1:06:00 AM G--M- NE (34 DEG) 6 MPH 32.9195 N 80.0154W
1:06:00 AM G--M- NE (34 DEG) 6 MPH 32.9195 N 80.0154W
4:05:00 AM G---- (0 DEG) 0 MPH 32.9195 N 80.0155W
4:09:00 AM G--M- NW (306 DEG) 30 MPH 32.9044 N 80.0223W
4:11:00 AM G-EMS NW (320 DEG) 73 MPH 32.9229 N 80.0541W
4:12:00 AM G--M- N (351 DEG) 71 MPH 32.9447 N 80.0757W
4:14:00 AM G-EMS NW (307 DEG) 75 MPH 32.9718 N 80.0837W
4:15:00 AM G--M- NW (319 DEG) 72 MPH 32.9890N 80.1019W
REPORTS
DETAILED ACTIVITY
SELECT MODE
DEMO
1050
SELECT
1060
26
DAY
NOV.
MONTH
2000
YEAR
SUBMIT
1070

FIG. 10

FIG.11


1100
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File Edit View Favorites Tools Help
Address w.discretewireless.com/dwrl/members/default.asp
Go
Back
Forward
Stop
Refresh
Links
DISCRETE WIRELESS
1110
MAPS
ACCOUNT INFORMATION
CONTACTS
HELP
LOGOUT
FIND | RADAR | REPORTS | HISTORY | ZONES | ALERTS | LABELS
Canton
Cumming
Holly Springs
Cartersville
Little Shoal Creek Public U
Buford
George Washington Carver State Park
Woodstock
Alpharetta
Suwanee
Acworth
Auburn
Rockmart
Kennesaw
Roswell
Duluth
Marietta
Norcross
Lawrenceville
Dallas
Doraville
Lilburn
Fair Oaks
Smyrna
Snellville
Powder Springs
Vinings
Tucker
Loganville
Austell
Mableton
Stone Mountain
Douglasville
Atlanta
Redan
Lithonia
Conyers
College Park
Lake City
Covington
Union City
Fairburn
Palmetto
Riverdale
Jonesboro
Tyrone
Fayetteville
McDonough
Newnan
Peachtree City
Hampton
© 2000 DeLorme
1120
1130
ZOOM OUT
ZOOM IN
W E SW SE S
9.5 mi.
Function:
Recenter
HISTORY
Select mobile: 1140
Select Day: 1150
2 Day
October Month
2001 Year
Select Time: 1160
6:00 AM From Hour
6:00 PM To Hour
Show: 1170
Time
Stops
Route Markers
Trail
Highlight
Speed >
mph
SUBMIT
1180
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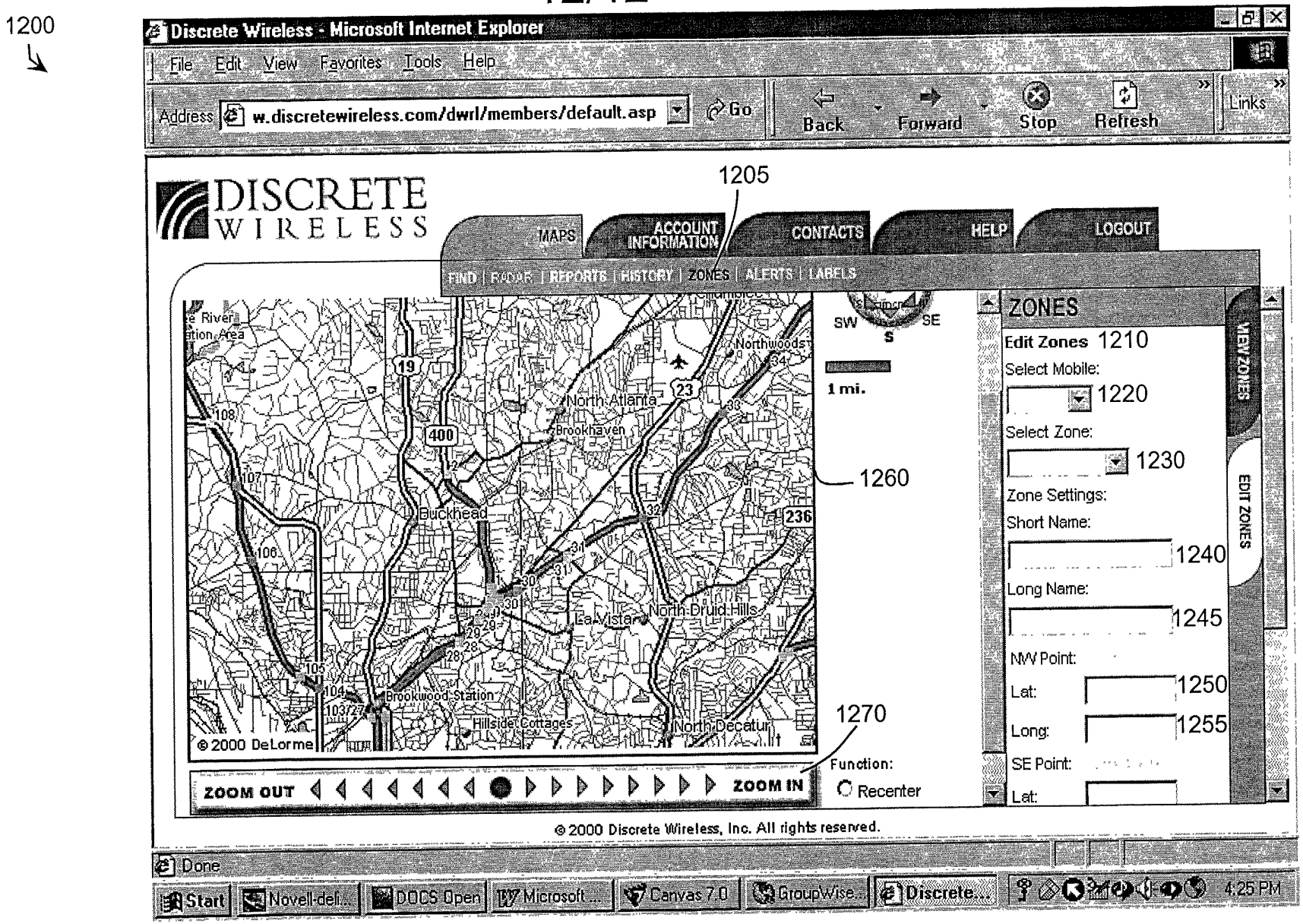
http://www.discretewireless.com/dwrl/members/navbar.maps.asp?subnav=3#

FIG. 12


1200
Discrete Wireless - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address w.discretewireless.com/dwrl/members/default.asp
Go Back Forward Stop Refresh Links
DISCRETE WIRELESS
1205
MAPS
ACCOUNT INFORMATION
CONTACTS
HELP
LOGOUT
FIND | ROUTE | REPORTS | HISTORY | ZONES | ALERTS | LABELS
1260
1 mi.
ZONES
Edit Zones 1210
Select Mobile:
1220
Select Zone:
1230
Zone Settings:
Short Name:
1240
Long Name:
1245
NW Point:
Lat:
1250
Long:
1255
SE Point:
Lat:
VIEW ZONES
EDIT ZONES
1270
Function:
Recenter
ZOOM OUT
ZOOM IN
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Done
Start Novell-del... DOCS Open Microsoft... Canvas 7.0 GroupWise... Discrete... 4:25 PM